

## ABSTRACT

The invention is directed to the family of aggrecan degrading metallo proteases (ADMPs) that exhibit the ability to cleave the aggrecan core protein between amino acid residues Glu<sup>373</sup>-Ala<sup>374</sup>. The invention encompasses the nucleic acids encoding such enzymes, processes for production of recombinant ADMPs, compositions containing such enzymes, and the use of these enzymes in various assays and for the development of novel inhibitors for use as therapies for diseases involving aggrecanase-mediated degradation of cartilage or other aggrecanase-associated diseases.